Activity - 3

Consider the string “Welcome to Python world”. Perform the following operations:

A. Count the number of alphabets in the given string.

Method: Using isalpha() + len()

In [1]:

```
test_str = 'geeksfoegeeks !!$ is best 4 all Gekks 10-0'
print("The Original string is : "+str(test_str))
res=len([ele for ele in test_str if ele.isalpha()])
print('Count of Alphabets: '+str(res))
```

```
The Original string is : geeksfoegeeks !!$ is best 4 all Gekks 10-0
Count of Alphabets: 27
```

Method: Using ascii_uppercase() + ascii_lowercase() + len()

In [9]:

```
import string
test_str='geeksforgeeks !!$ is best 4 all Geeks 10-0'
print('The original string is: '+str(test_str))
res=len([ele for ele in test_str if ele in string.ascii_uppercase or ele in string.
print('Count of Alphabets: '+str(res))
```

```
The original string is: geeksforgeeks !!$ is best 4 all Geeks 10-0
Count of Alphabets: 27
```

B. To extract characters in the given, range from the given string.

Method : Using join() + list comprehension

In [12]:

```
test_list = ["geeksforgeeks", "is", "best", "for", "geeks"]
print("The original list is : " + str(test_list))
strt, end = 14, 30
res = ''.join([sub for sub in test_list])[strt : end]
print("Range characters : " + str(res))
```

```
The original list is : ['geeksforgeeks', 'is', 'best', 'for', 'geeks']
Range characters : sbestforgeeks
```

C. Check if the string is alphanumeric or not.

In [13]:

```
string = "abc 123"
print(string, "is alphanumeric?", string.isalnum())

string = "abc_123"
print(string, "is alphanumeric?", string.isalnum())

string = "000"
print(string, "is alphanumeric?", string.isalnum())

string = "aaaa"
print(string, "is alphanumeric?", string.isalnum())
```

```
abc 123 is alphanumeric? False
abc_123 is alphanumeric? False
000 is alphanumeric? True
aaaa is alphanumeric? True
```